

fig. 1

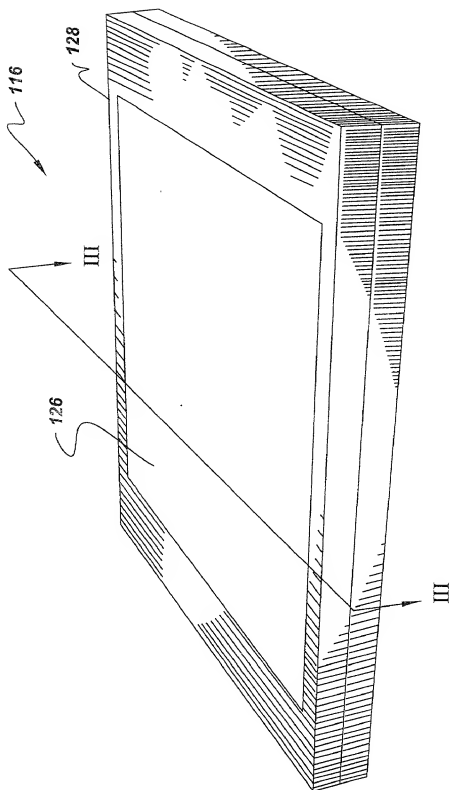


fig. 2
(PRIOR ART)

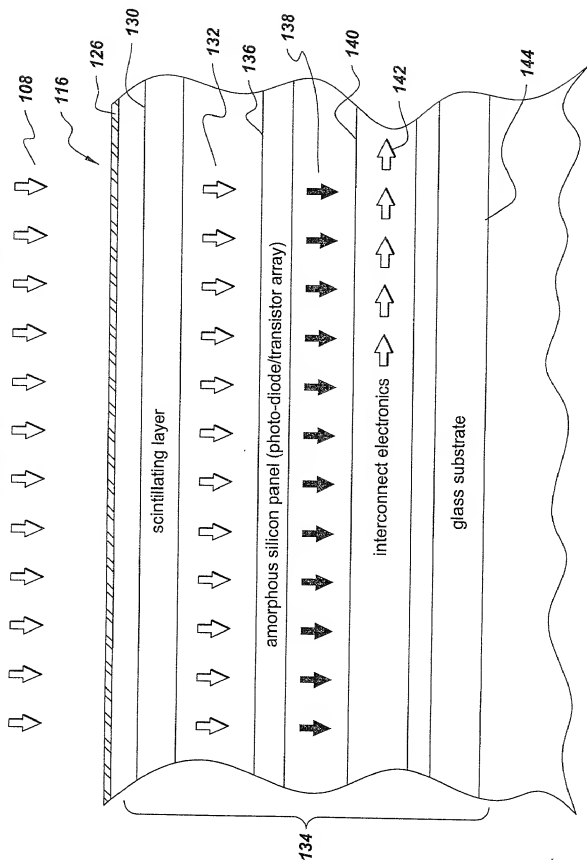


fig. 3

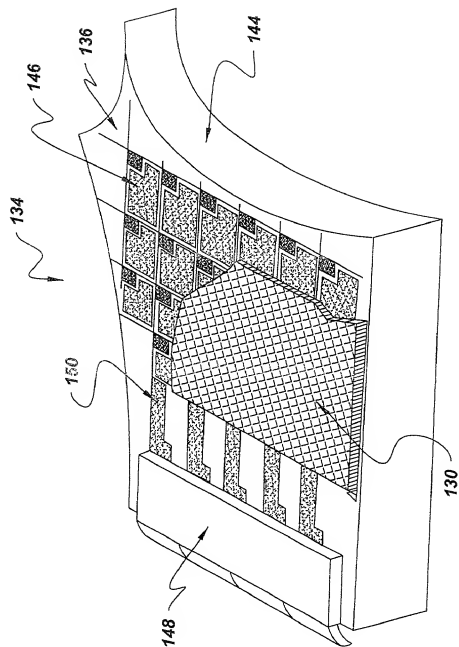


fig. 4
(Prior Art)

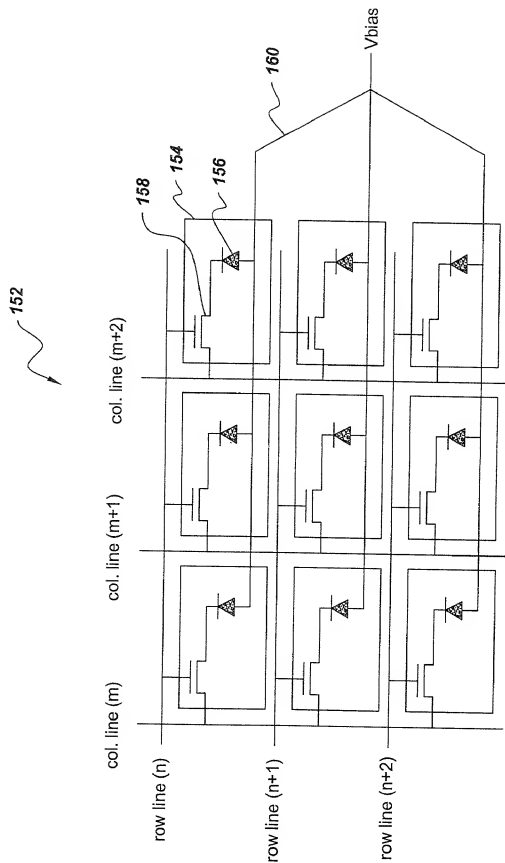
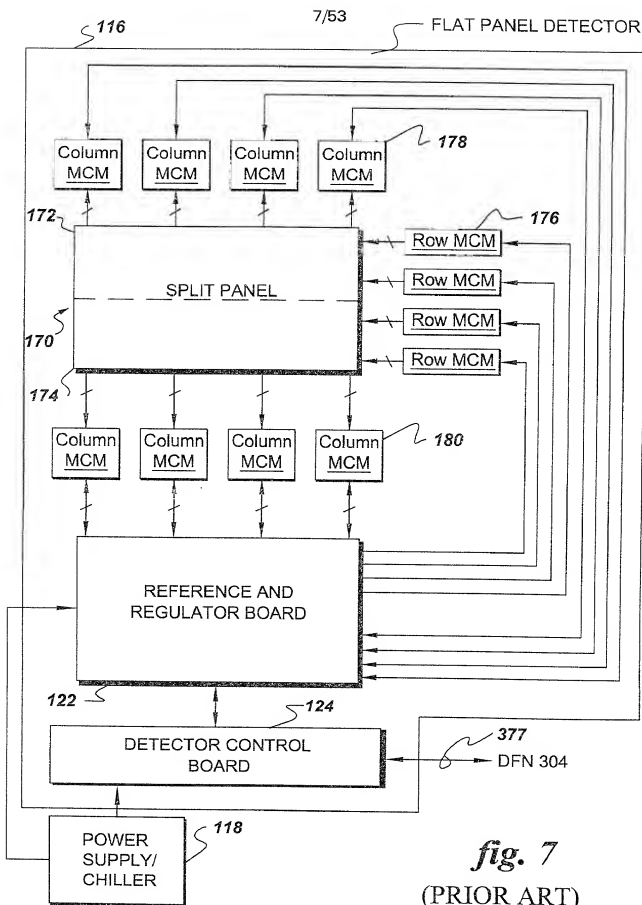
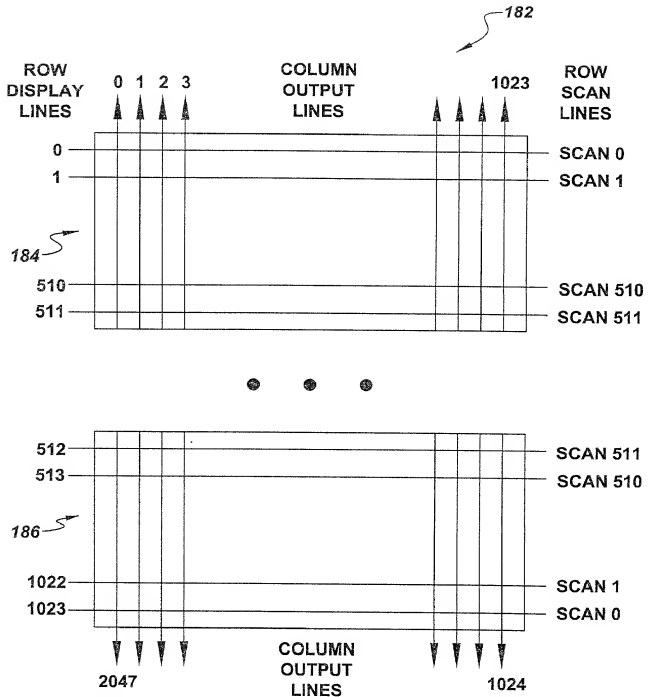


fig. 5
(Prior Art)





CARDIAC/SURGICAL DIGITAL X-RAY PANEL

fig. 8
(PRIOR ART)

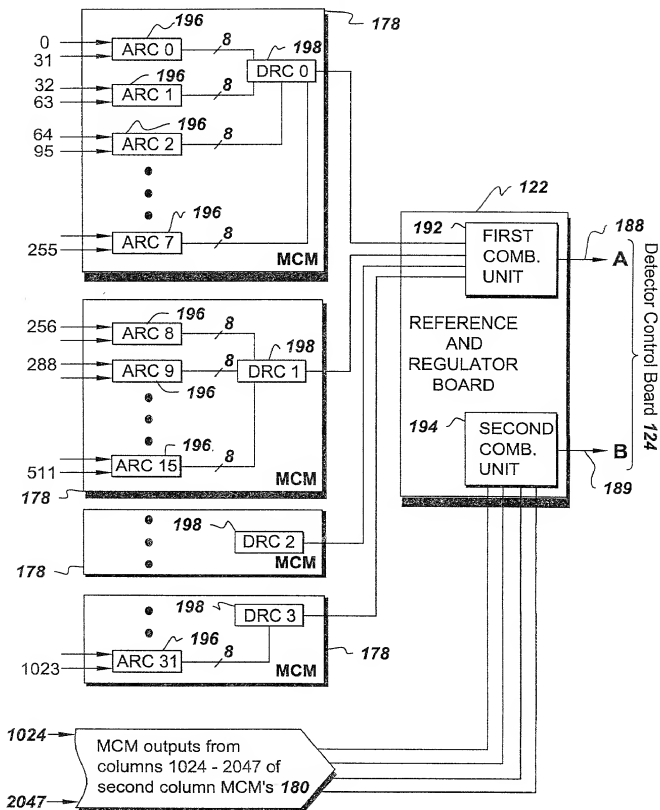
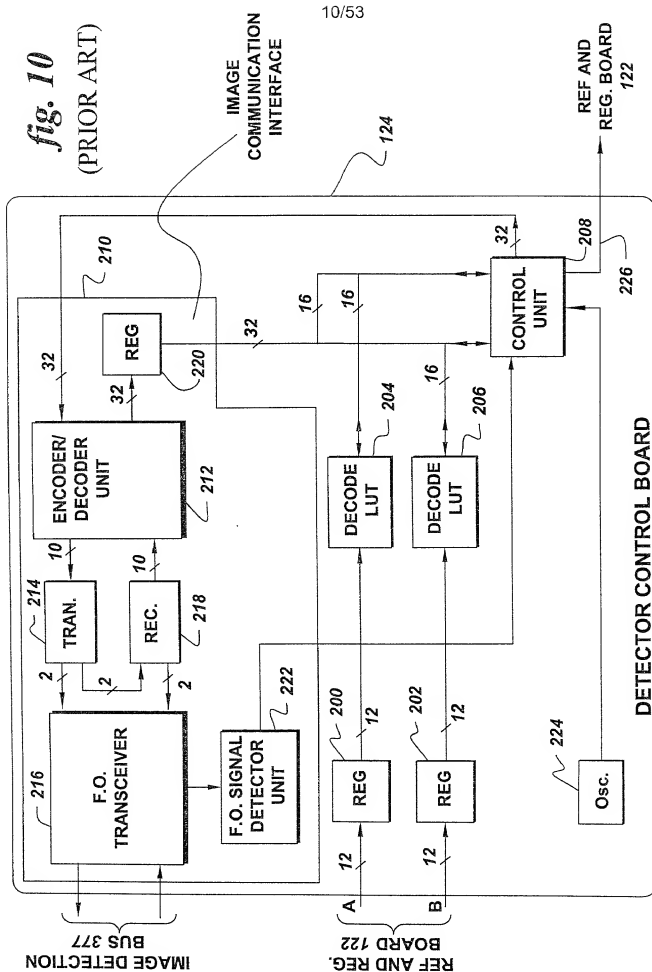
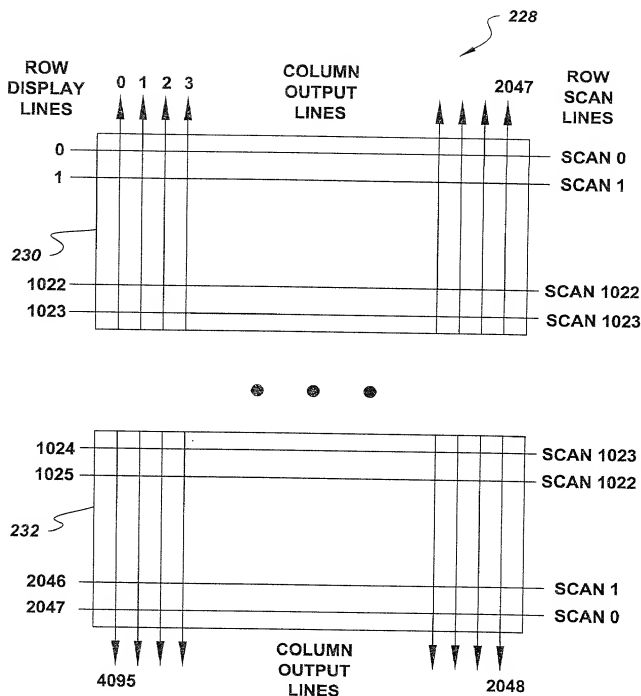


fig. 9 (PRIOR ART)

fig. 10
(PRIOR ART)





RADIOGRAPHY DIGITAL X-RAY PANEL

fig. 11 (PRIOR ART)

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FLAT PANEL DETECTOR

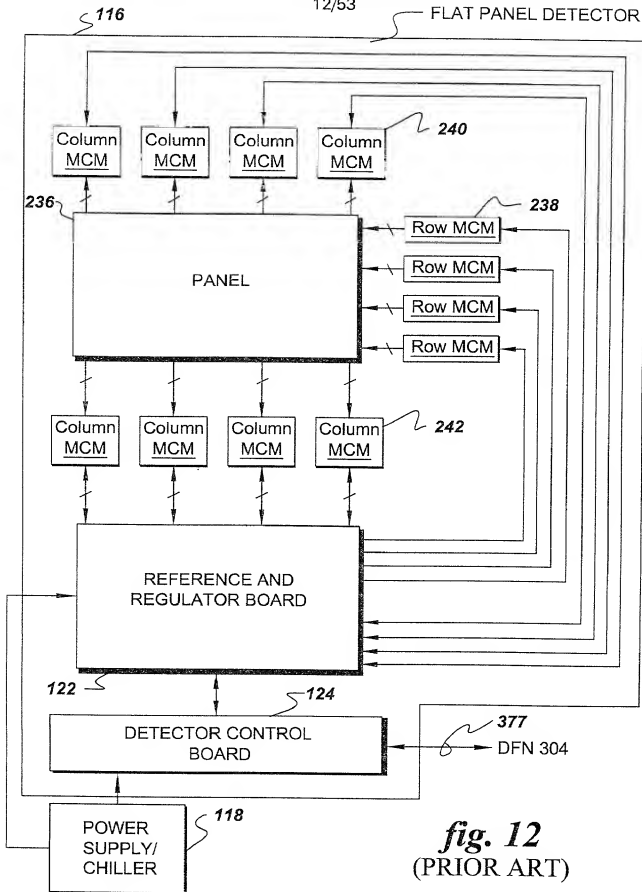
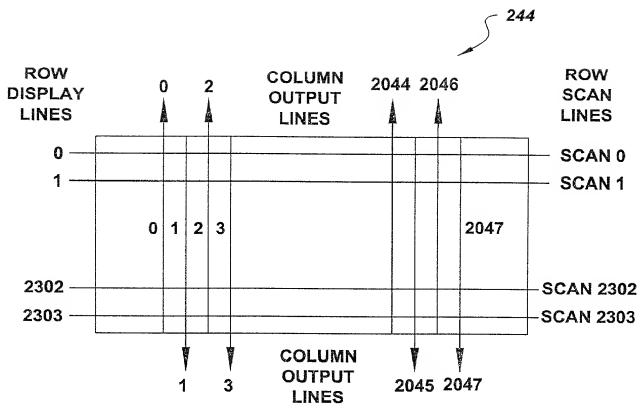


fig. 12
(PRIOR ART)



MAMMOGRAPHY DIGITAL X-RAY PANEL

fig. 13
(PRIOR ART)

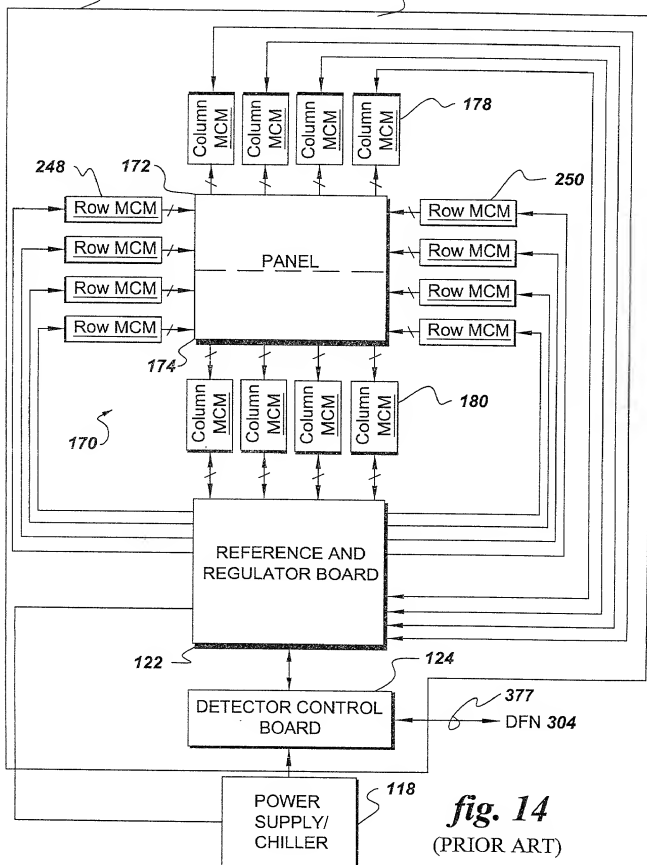


fig. 14
(PRIOR ART)

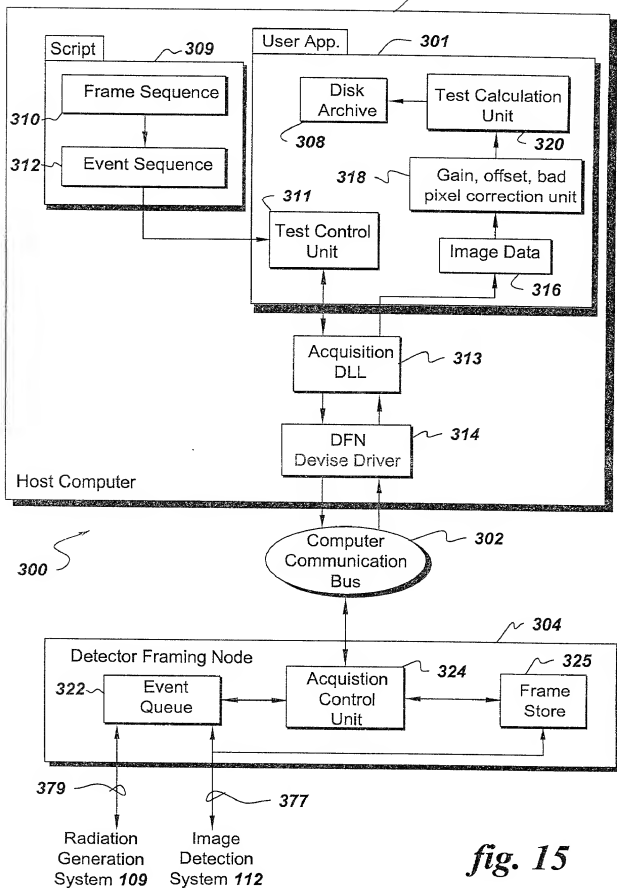


fig. 15

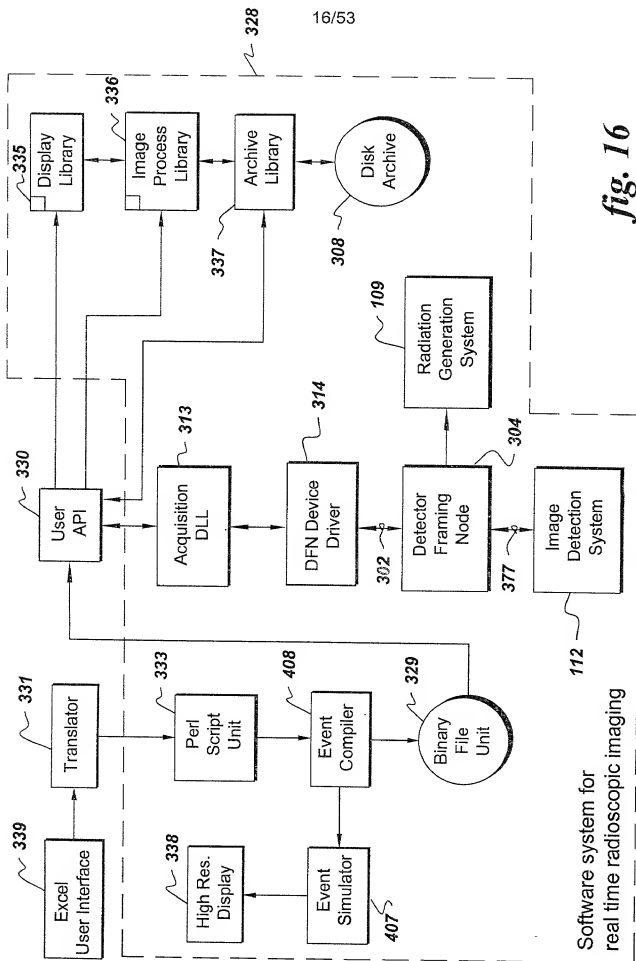
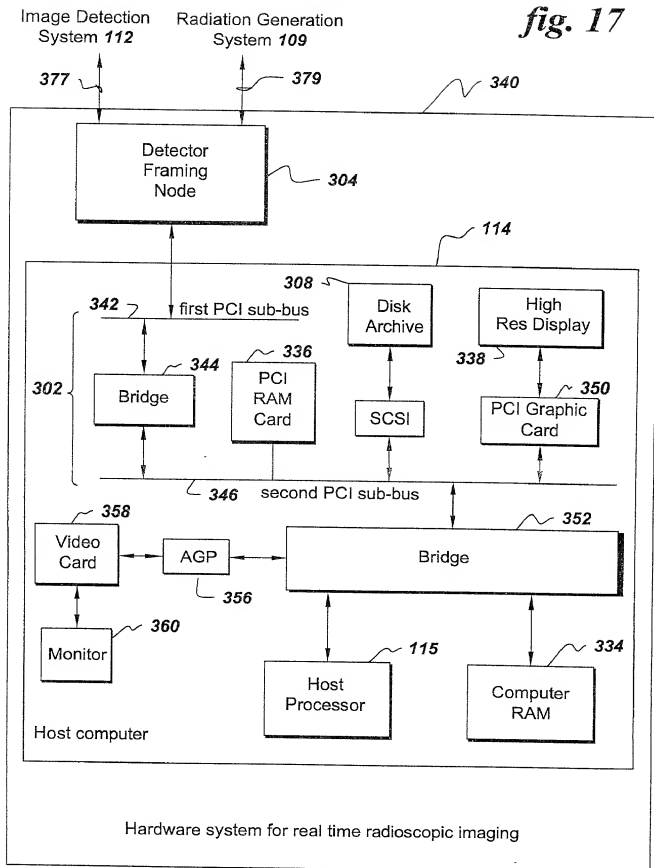


fig. 16

fig. 17



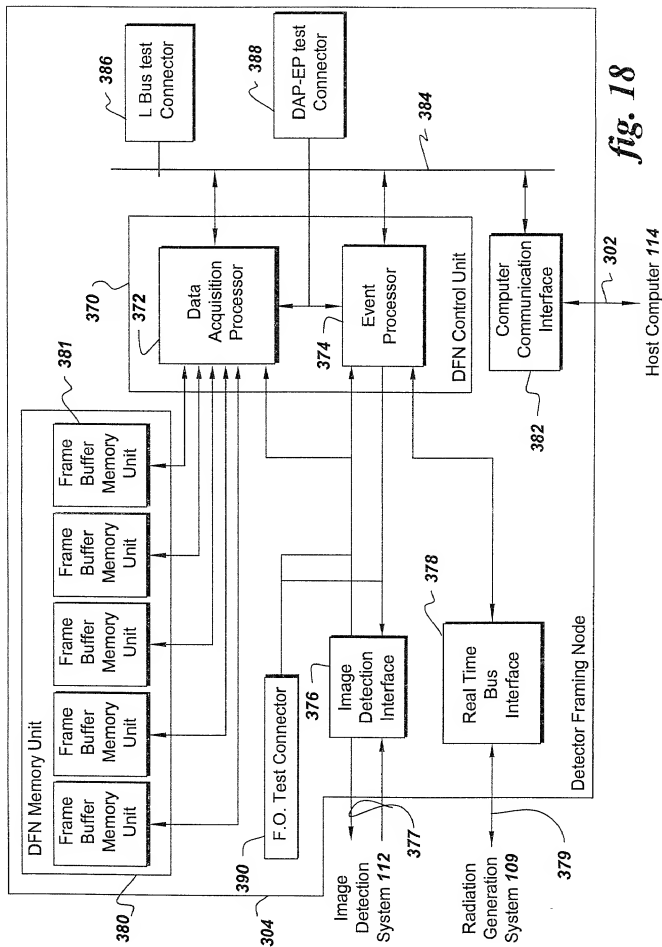


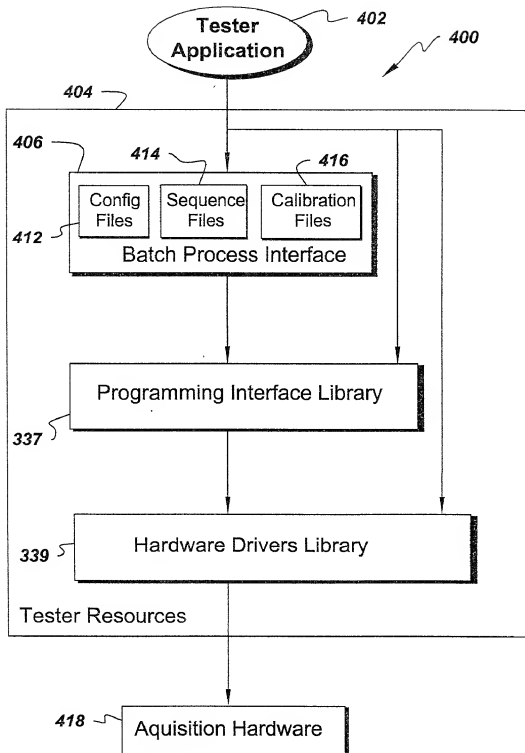
fig. 18

	(fm/sec)	length	latency	memory	offset	gbr
Panel Setup	Real Time	30	unlimited	host	none	
Single Frame	Post Process	-	Delay ~.1 sec	"	y	
Single Frame	Post Process	-	Delay ~.2 sec	"	y	y
Real Time	Real Time	R	unlimited	host	none	
Real Time	Real Time	R-X	unlimited	"	y	
Real Time	Real Time	R-Y	unlimited	"	y	y

fig. 19

Modality	image size	Frames Stored host memory
Cardiac	1024 X 1024	200
Rad	2048 X 2048	50
Mammo	2304 X 2048	44

fig. 20

*fig. 21*

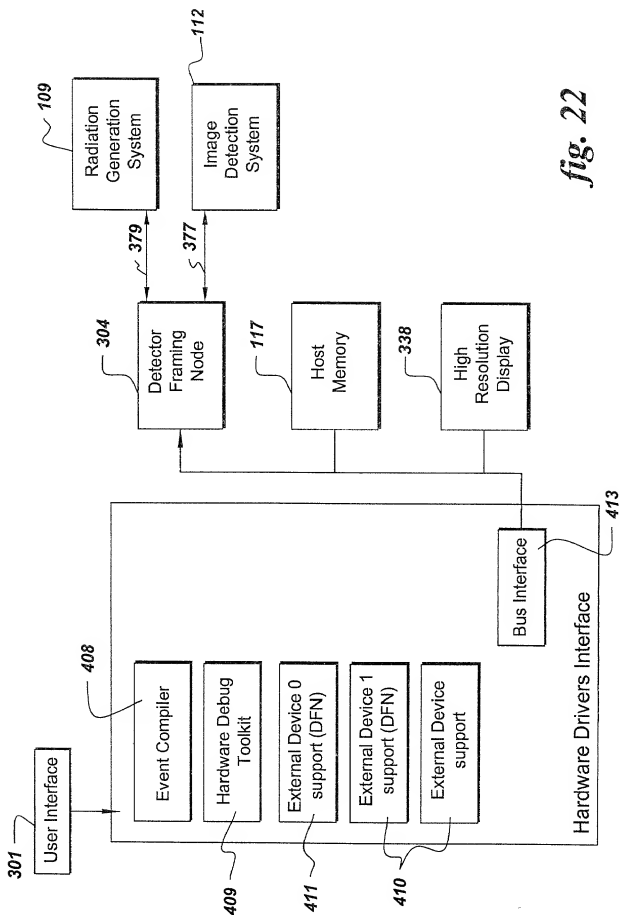


fig. 22

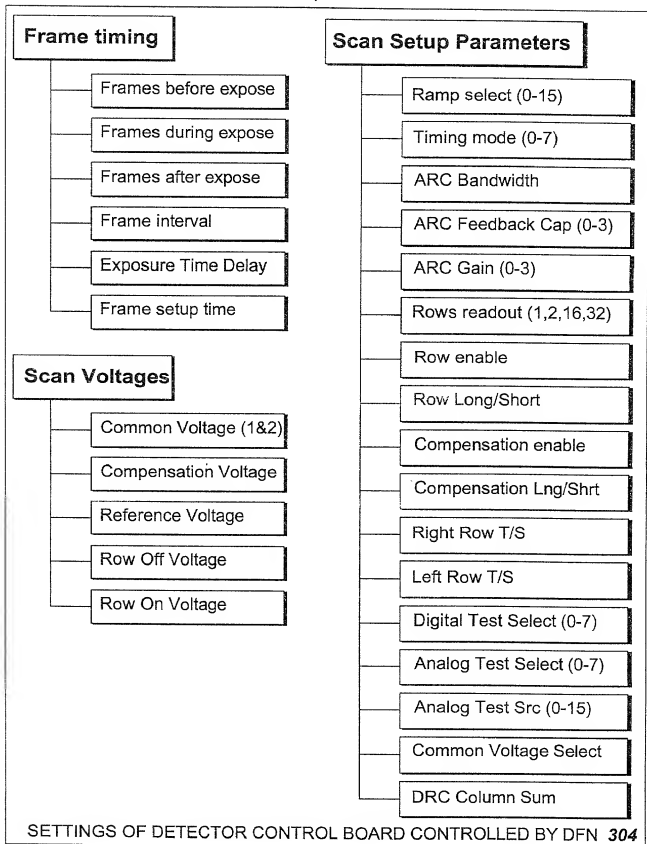
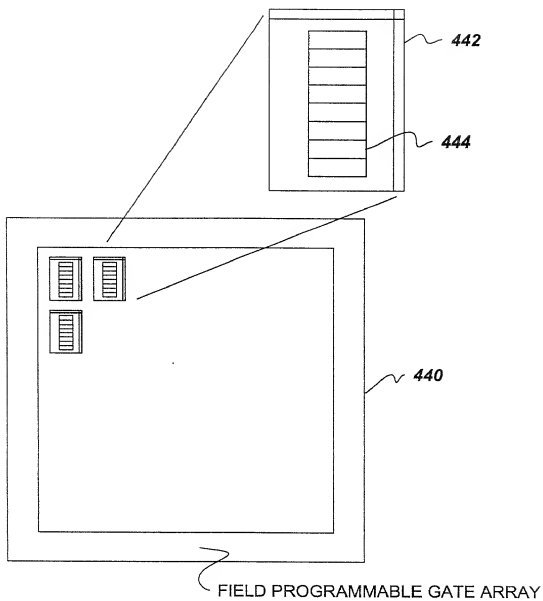
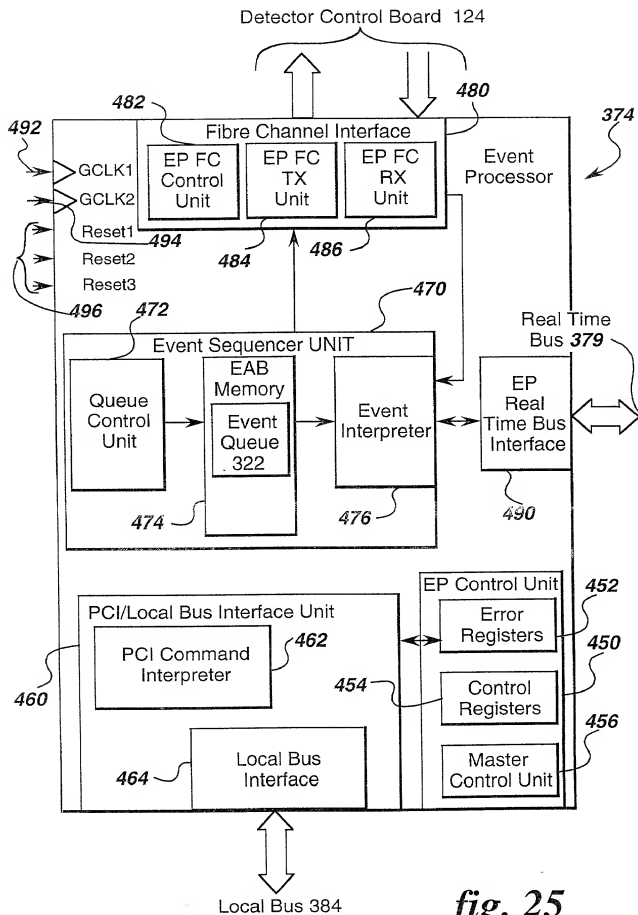
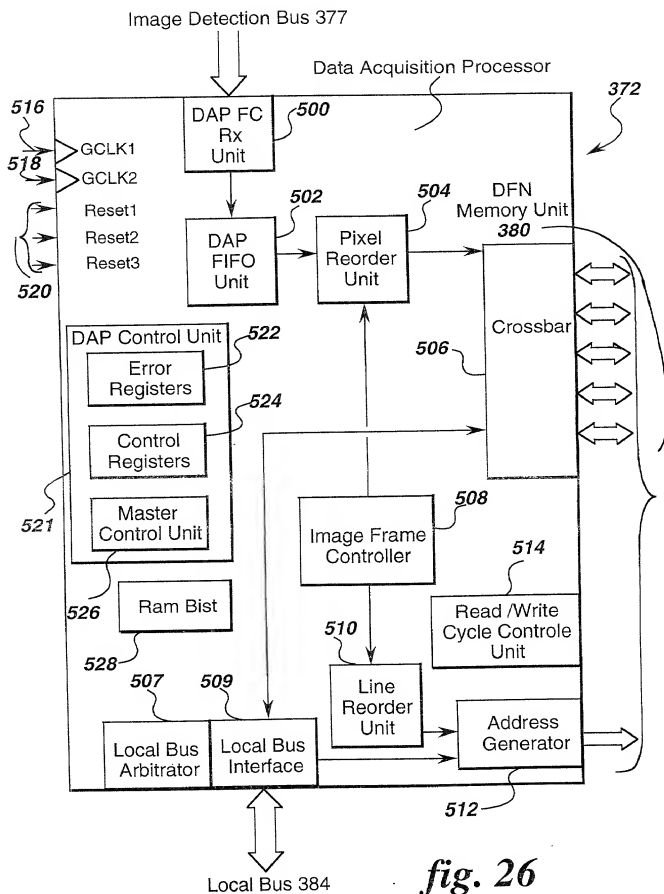


fig. 23

*fig. 24*





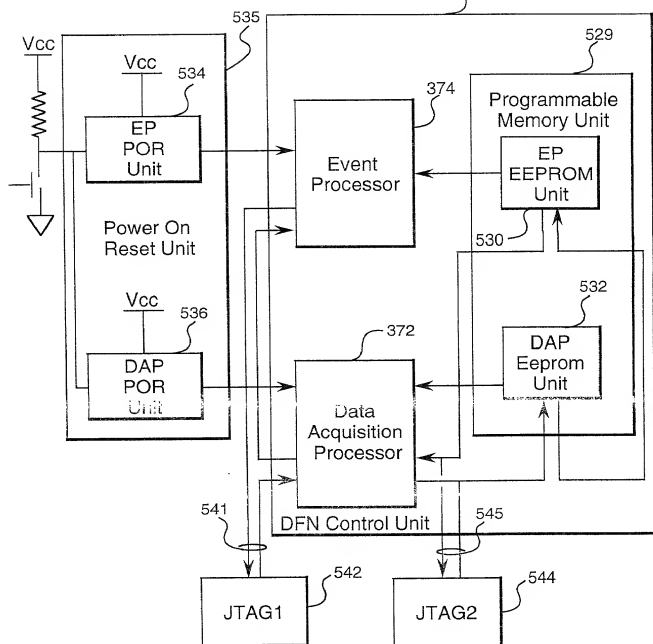


fig. 27

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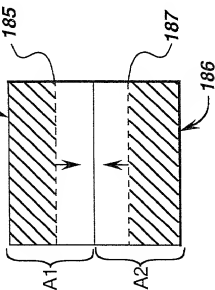


fig. 28

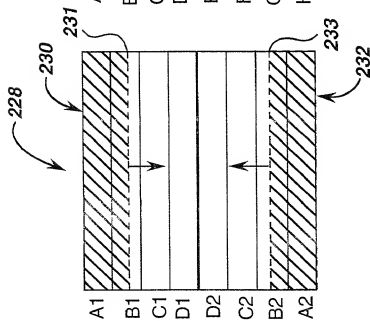


fig. 29

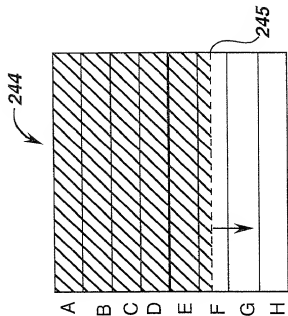
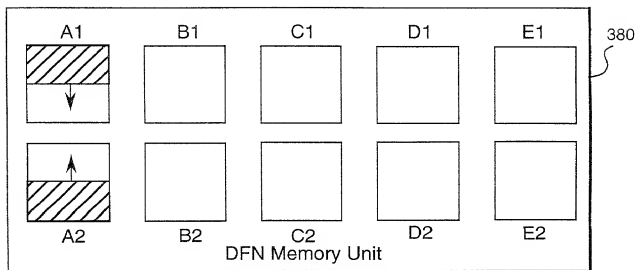
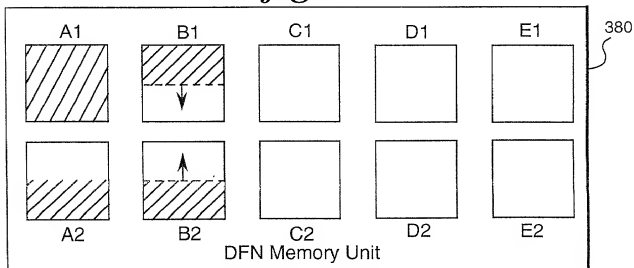
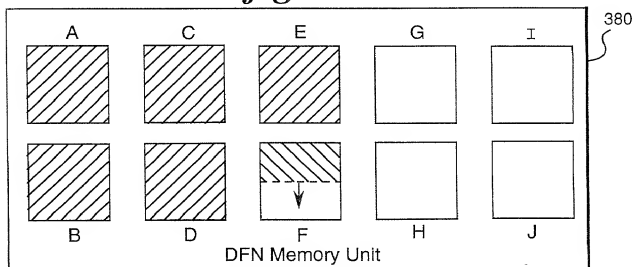


fig. 30

*fig. 31**fig. 32**fig. 33*

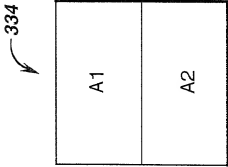


fig. 34

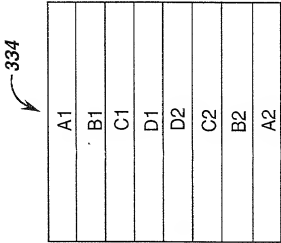


fig. 35

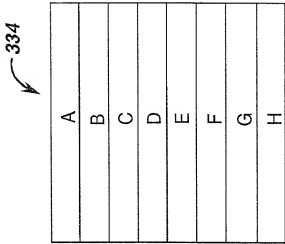
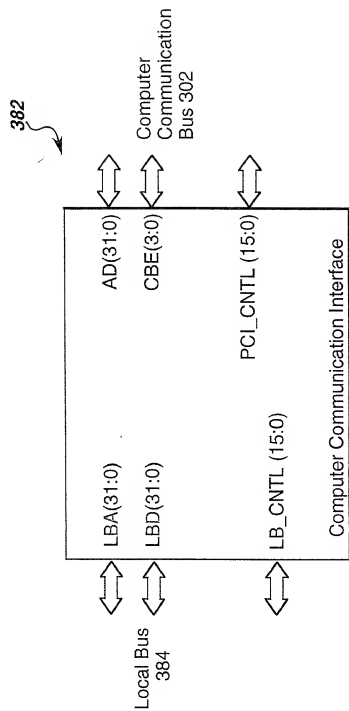


fig. 36

*fig. 37*

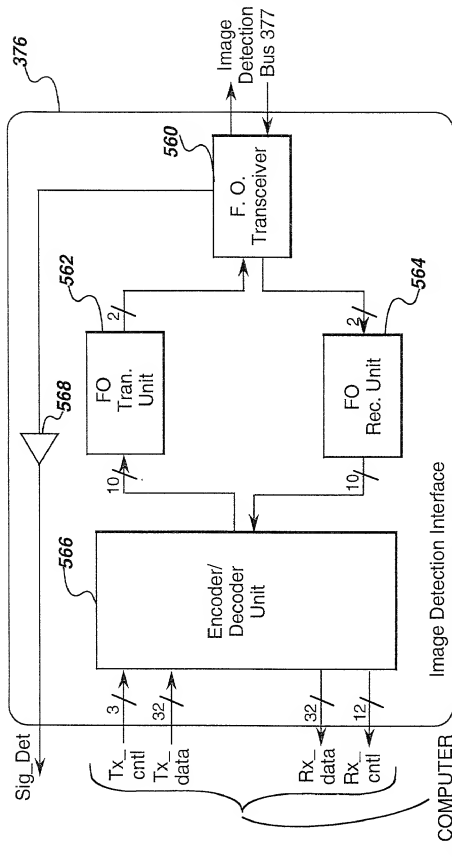
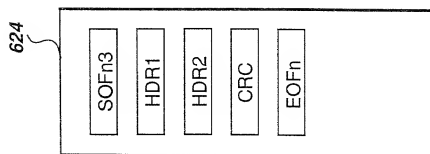
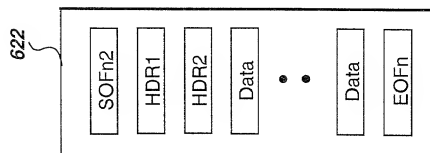
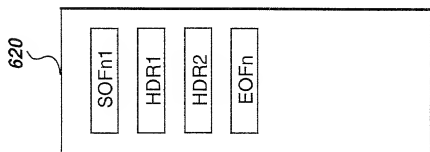
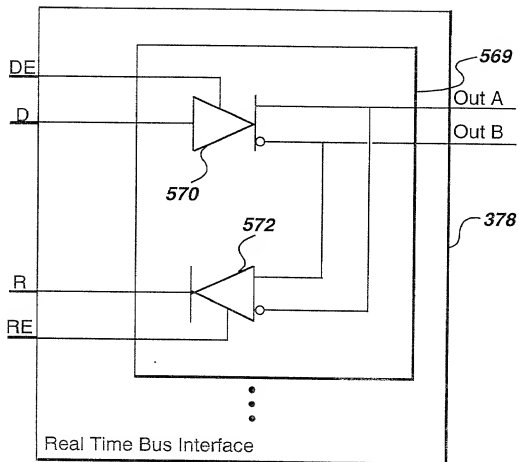
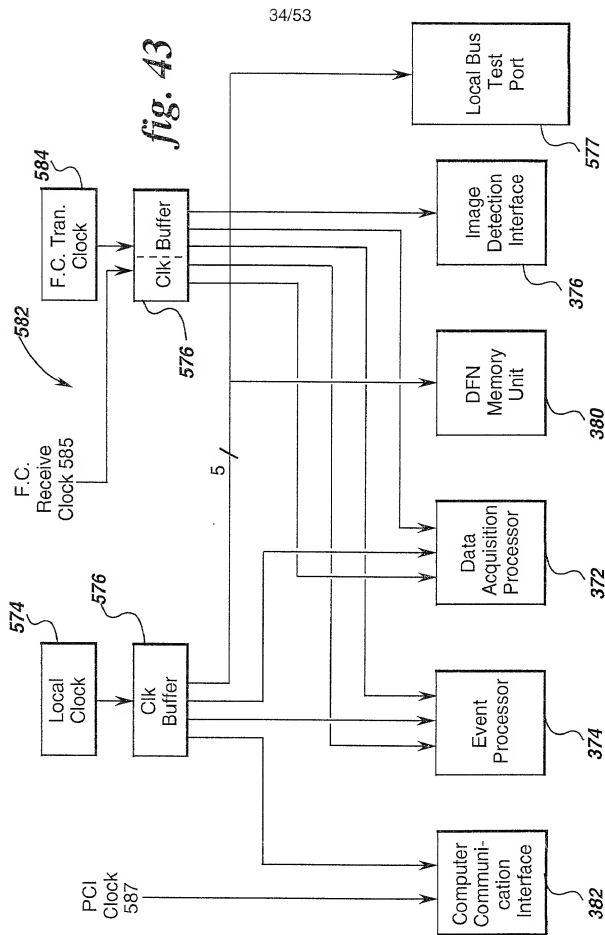
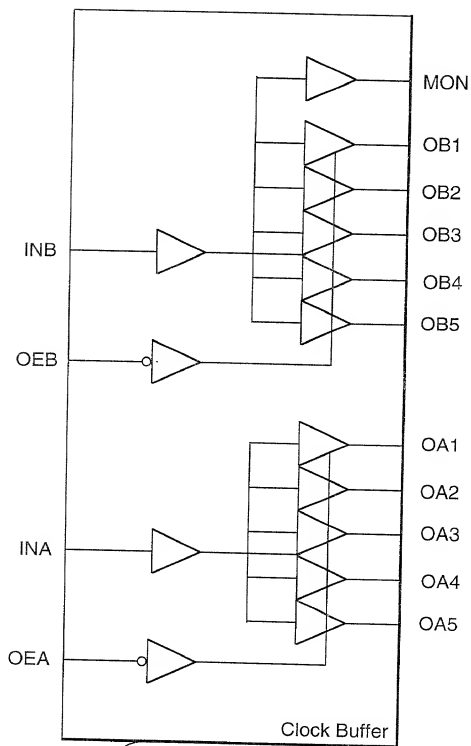


fig. 38

*fig. 41**fig. 40**fig. 39*

*fig. 42*





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fig. 44

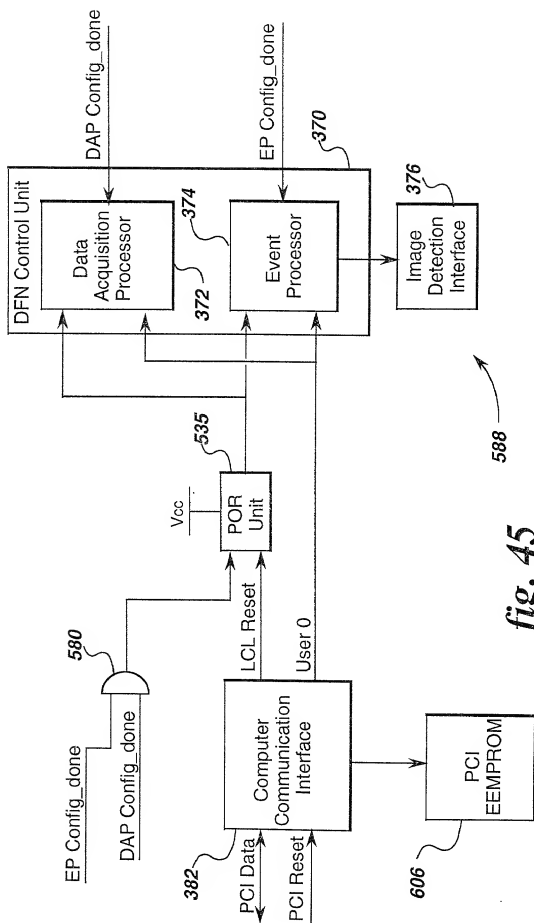
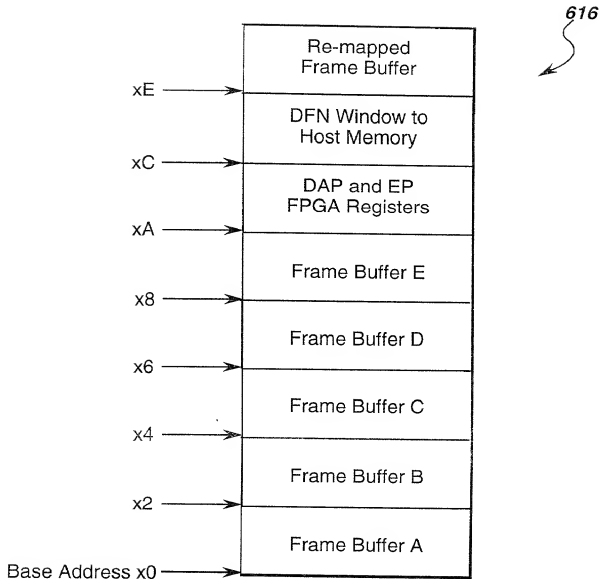


fig. 45

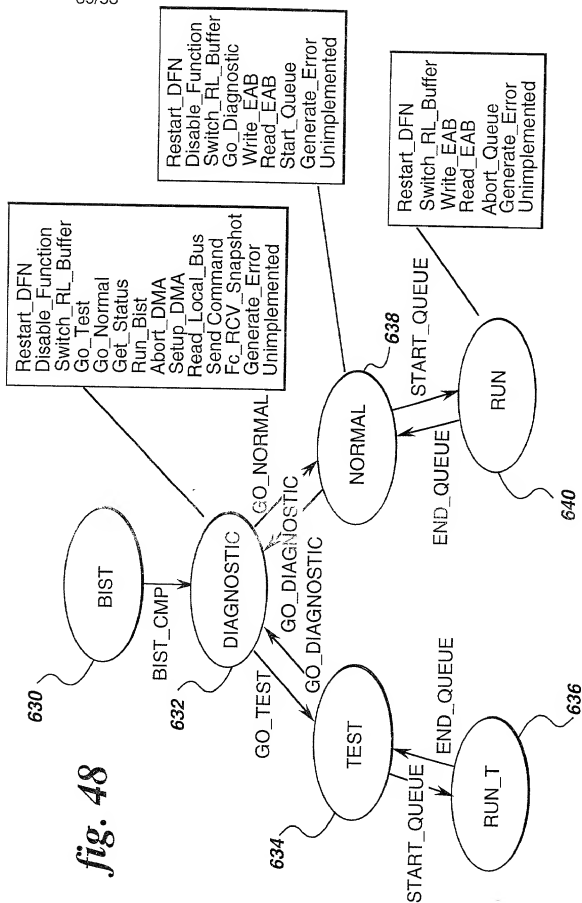


fig. 46



Mapping of 16 MByte PCI Address Space

fig. 47



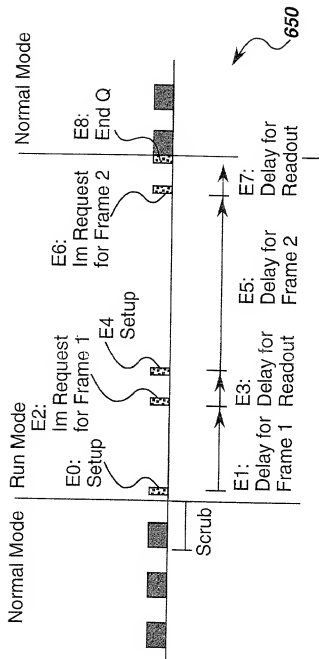


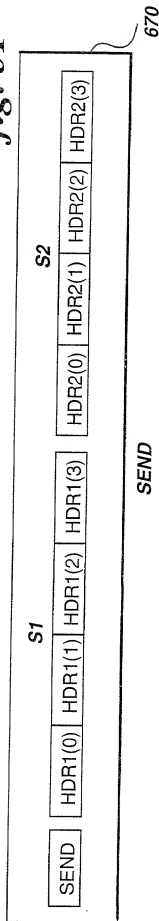
fig. 49

fig. 50

Event Mnemonic	Event (showing size of arguments)	Op Code (hex)	Data (bytes)	Total (bytes)
Endq	Endq	14	0	1
Delay (T)	Delay (0xff ff ff)	10	4	5
Send (command, value)	Send (0xff ff ff ff, 0xff ff ff)	04	8	9
LoopKN (K, N)	LoopKN (0xff ff, 0xff)	0C	3	4
LoopKF (K, F)	LoopKF (0xff ff, 0xff ff ff)	0D	5	6
Wait (F)	Wait (0xff ff, ff)	09	3	4
Flag (F)	Flag (0xff ff, ff)	08	3	4

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fig. 51



Error Mnemonic	Description of Error
FC_TIMEOUT	Timeout Expired With No ACK Detected
FC_BAD_ACK	ACK Did Not Match Transmitted Command
FC_EXTRA_ACK	Unexpected ACK Received
FC_EXTRA_CMD	New Send Event While Waiting for ACK From Previous Send
SIG_DET_N	No Input Signal Power on Fibre Channel (Cable Disconnected?)
RXERROR	Fibre Channel Receiver Detected Bad Data (Defective Chipset?)
WRDSYNGCN	Fibre Channel Data Link Unsynchronized
CRXS(1)	Bad Received CRC Detected (Fiber-optic Cable Problem?)
CRXS(3) & CRXS(2)	Bad Order in Link State Machine (Defective Chipset?)

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fig. 52

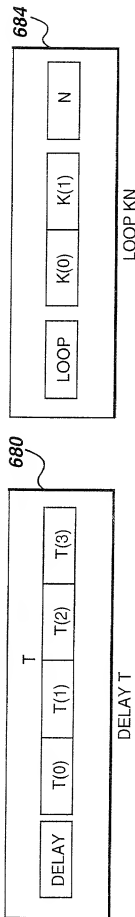


fig. 53

fig. 54

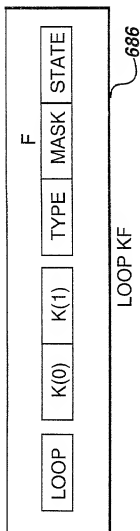


fig. 55

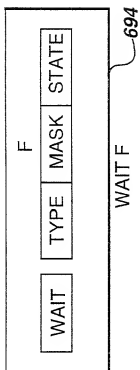


fig. 56

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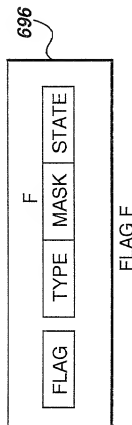


fig. 57

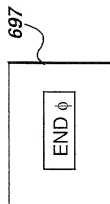


fig. 58

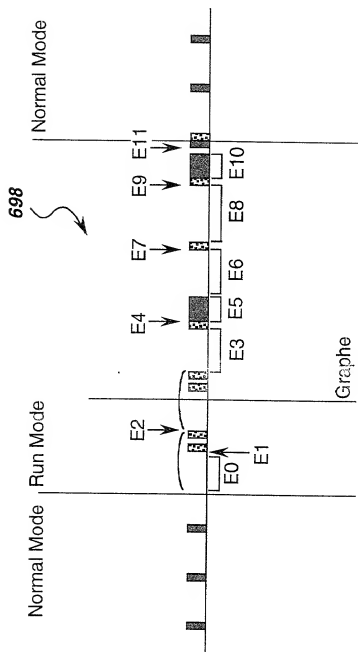
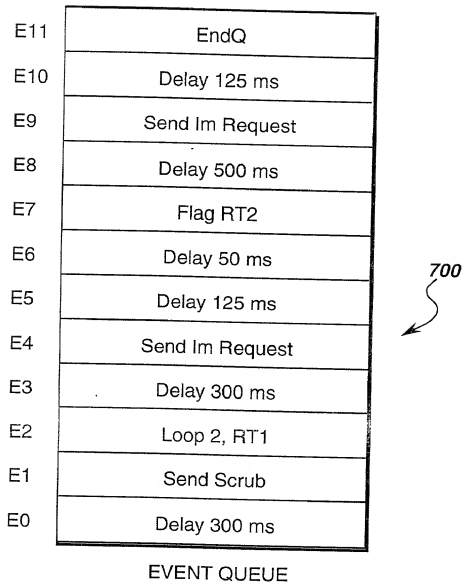


fig. 59

*fig. 60*

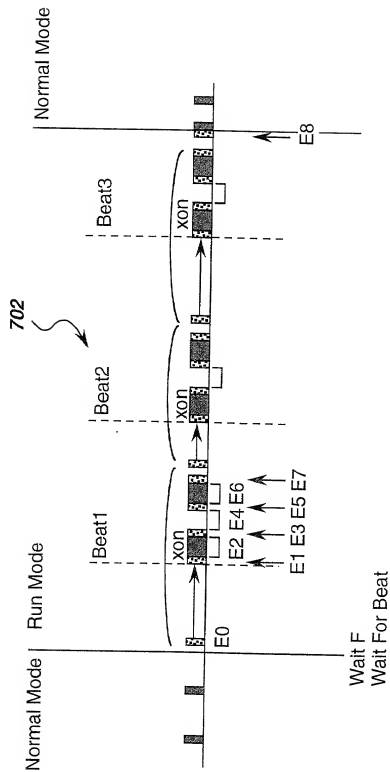
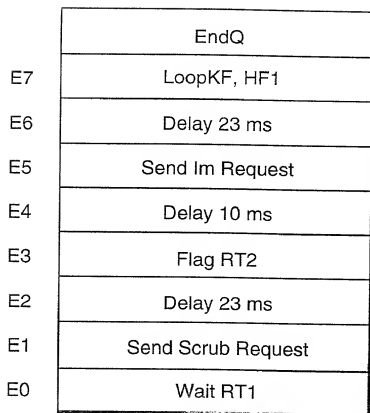
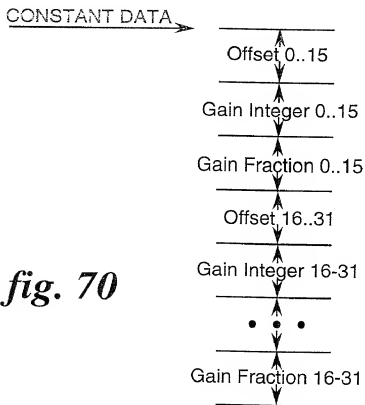


fig. 61

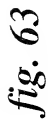


EVENT QUEUE

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fig. 62*fig. 70*

Constant Memory Format




```
sequence_begin ( );
# define qv defaults:
%qv1 =('delay_qv' => 5000);
# call frame with qv's
frame_type1(NULL, %qv1, 1);
sequence_end ( );
```

fig. 64

```
sub frame
{
  $QV1 = 'frame';
  %qv = ('delay_qv' => [10000]);
  %qp = ( );
  compile_init (@_, %qp, \%qv, $QV1);
  Delay('Delay_qv1');
  compile_finit ( );
}
```

fig. 65

```
pDFN->DFNChangeQueueVariable
(
  (char *) SymName,
  (char *) sndBuf,
  BufSize
  (ULONG *) & Debug
);
```

fig. 66

```
// variable name
// new value
// num bytes to write
// developer info
```

```

// load and run the event sequence
pDFNBeginSequenceNoMappingNoLog
    (snum,"d:\\HF.bin");
// assign data to be passed
sndBuf = 25000;
// change the queue variable
pDFN->DFNChange QueueVariable
(
    (char *) SymName,           // variable name
    (char *) sndBuf,           // new value
    (ULONG ) sizeof sndBuf     // num bytes to write
    (ULONG *) & debug         // developer info
);

```

fig. 67

```

sub frame_type1
{
    $HFfrm = 'frame_type1';
    %qv = ('delay_qv' = > [20000]);
    %qp = ( );
    $image_cmd = [0x800000,0x0];
    compile_init (@_,\%qp, \%qv, $HFfrm);
    Send ( $image_cmd);
    Delay('delay_qv');
    LoopKF(2, 0xAAFF01);
    compile_finit( );
}

```

fig. 68

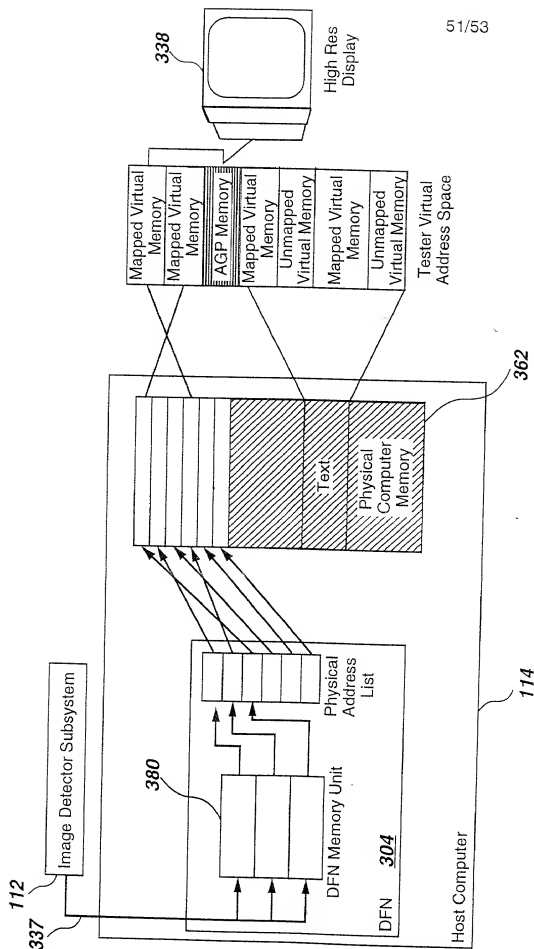
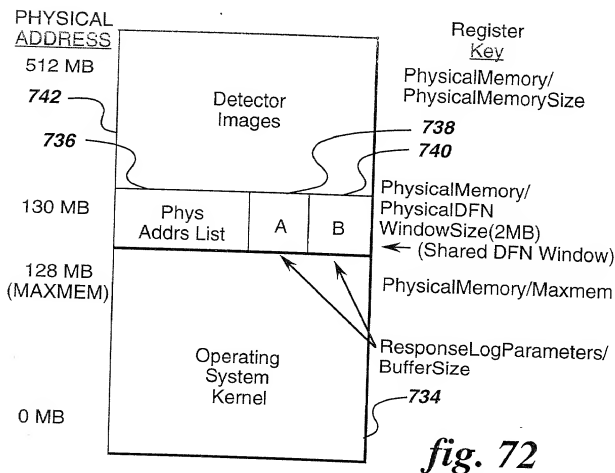
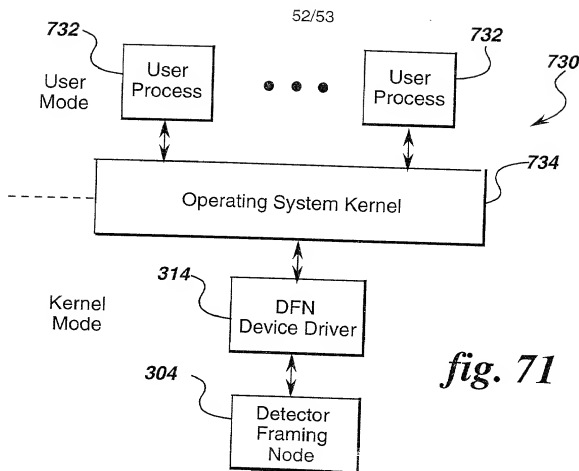
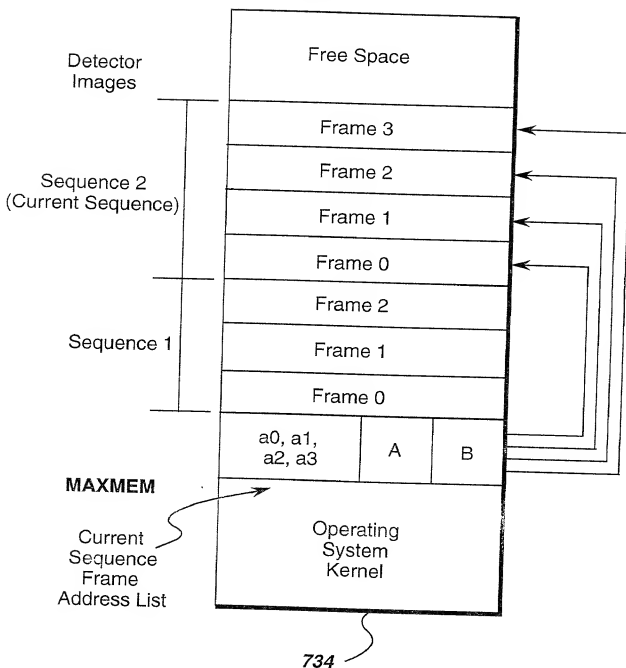


fig. 69



*fig. 73*